

AN ESSAY
ON THE
CANKER AND CORNS
OF
HORSES' FEET.

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ON CANKER.

THE CANKER is a dreadful disease incident to the feet of horses, and not of unfrequent occurrence, being very troublesome to cure, and of unsightly appearance, exciting the same sensations in the mind of horror and dislike, as do the loathsome animals whose names have been applied to it; hence the term *cancer* or *canker*, the *crab*, and the French term *crapaud* or *toad*, and at other times *lupus* or the *wolf*.

We venture, however, to assert, that there is nothing specifically poisonous generated in sores of this description, as in the human cancer, though it has been so imagined by many; from having ourselves been frequently inoculated with secretions from these sores, (as have no doubt thousands of others,) without perhaps an instance of any infection arising from it; nor in the cure is there any specific necessary, as in the cancerous, rabid, or venereal poisonous ulcers.

It may be defined, perhaps, as a simple ulceration of the *corniferous*, or horn-bearing parts of the foot, attended with more or less weakness of the parts in forming horn, and generally of irritation from the horny edges surrounding the sore; nor in the cure is there any specific necessary, as we have before observed, but the greatest diligence and attention are requisite in destroying those causes of irritation, and in procuring and encouraging the natural growth of the horn over the exposed parts, which in old cases, is found difficult enough.

In describing the situation and appearance of this disorder, we may observe, that all parts of the foot that are covered with horn may become the seat of this complaint, and its appearance will vary indefinitely, depending upon the greater or less degrees of weakness of the sore, or irritation from the surrounding horn. The most usual appear-

ance however, is a light puffy fungus, easily bleeding when touched, and rising higher than the edges of the surrounding horn, giving out a thin watery discharge, with a disposition in the ulcer to spread and run under the contiguous horn, and if not timely checked, it will extend itself over the whole foot, when the hoof falling off the horse is necessarily lost. On the other hand, where the proper means of correcting this ulceration are used, the irritating edges are removed, the fungus is reduced, the parts become dry, horn again extends itself over the diseased surface, and the foot becomes as perfect as it was before.

The time often required to correct the morbid disposition in the part itself, and afterwards in procuring the natural growth of the horn, is so truly tedious, as, in very many cases, to make the expences of keep and cure more than over-balance the value of the horse, and it would be to the disadvantage of his proprietor to attempt it; in other cases it is so easily subdued as to be well worth the time and expense of curing.

The narrative of a case or two will be a more impressive way of describing the treatment of this complaint, than any exposition in general terms; and for this purpose, we shall select a successful and unsuccessful case, such as they occurred to us; and here let me remark, in doing that justice, I wish to hold an example of to every one in these matters, that among the shoeing smiths there are many who take great pride in the cure of this disorder, and whose practice, pretty much confined to this object, has rendered very expert; and as much depends on the adroit use of the drawing-knife in removing the horn from the ulcerated parts, they would have vastly the advantage over a young practitioner in this respect, though in other respects their treatment should be the same, though these have sometimes failed in bad cases, or the long protracted cure has rendered it of no real advantage to the proprietors. The disease we may observe is almost always artificially induced and may be prevented, which is of vastly more advantage to know than the mode of its cure.

The foot of the horse may be considered as partaking somewhat of the nature of a gland, which is giving out and secreting horn, and whose ulceration will be attended with other phenomena than occur in the ulceration of fleshy, or other parts of animal structure, and this peculiarity will render rather a different treatment necessary.

The following is a statement of the treatment of a successful case of this disorder, with some observations as the case proceeds.

A black draft horse that had been under the care of a shoeing-smith about nine or ten months to be cured, without success, was put under our care in a truly deplorable condition. The sole and frog were almost one extended surface of disease, secreting a white curdy fluid, which was poured out in great abundance about the sides of the frog; this fluid was probably formed of the union of lymph, and the vessels throwing out imperfect horn which became partially dissolved in it; the same appears to be secreted in running frush, and if allowed to remain long on the part, becomes highly fetid.

The edges of the horn encircling the sore were found to be detached, undermined, and black within, these were every where removed by thinning away the horn with a sharp drawing-knife, and when pared so thin and soft that the drawing-knife would no longer lay hold of it, a lancet blade, made rather stronger than those usually are for bleeding, and stuck in a handle, was used for thinning away the remaining part, and to dissect small bits of horn in situations where the drawing-knife would not conveniently reach. This tedious process was pursued on every side of the sore which was found to extend to the wall of the foot, and took up a considerable time, the effusion of the least blood being cautiously avoided, as this would flow over and obscure the parts to be cut. The foot was then smeared over with Egyptiac, or the cupreous acetite and honey, boiled together, though we found it equally, or superiorly efficacious for this purpose when made of blue vitriol and treacle, at a much less expence, which may be acceptable information to those who may have to use a large quantity of it; over this

dressing, pledgets of tow dipped in tar, and plentifully soaked with it are laid on, till they cover it to a considerable depth. A hollow shoe having been previously tacked on by a few nails, an iron plate is passed under it, and this is fastened in by iron splents between it and the shoe, and then driven moderately tight with a hammer: similar dressings are applied to the heels and sides of the foot if requisite, and then bound on tight with tar cords. These dressings require to be removed every 48 hours, or when the disease is very virulent, every day; if on removing the dressings they appear tolerably free from moisture, it is a favourable sign, if the foot reeks, and the dressings appear drenched with perspiration, little or no permanent horn will be found to have formed; if on the contrary, the parts are going on well, the ulcer will appear almost dry, with a brown scale of horn formed upon its surface, which will generally shell off of itself, if not removed, and is best removed, and this for several successive times, till the parts acquire the requisite strength for supporting the horn that is formed, which should however be kept as thin as possible for a considerable time, that it may not irritate and exfoliate again. The surface that was undermined, and from whence the horn had been recently removed will have swelled very much into a sort of more healthy fungus, and on the surface of which, horn will begin to form; this being removed, another layer beneath this takes place, and so on till it reaches the natural foot. By this curious process nature seems to acquire room, and avoids that compression which the immediate formation of horn on the ulcer would occasion. The parts of the sore that were subject to irritation may be known by the thin discharge, and the rising soft bleeding fungus, and the points of horn irritating them must be carefully removed to a considerable distance.

The first horn that forms, especially of the sole and frog, readily peels off, and exhibits underneath small white fibres, by which it adhered; the second coat is more firmly attached, and in recent cases where the powers of the foot are not weakened, will adhere and become perfect horn; but in old cases, it is requisite often to remove it, or thin

it down with the knife, and to keep it soft and pliant with tar dressings to prevent irritation and exfoliation.

Some, instead of *Egyptiac*, apply dry powdered verdigrease to the sore; others, butter of antimony; and some touch the surface with lunar caustic; others again, use dilute nitrous acid, or marine acid; and some are fond of red lead boiled down, and mixed with the *Egyptiac*, as making it more drying: these irritating measures, though appearing of good effect at first, may be carried too far, and do mischief and weaken the parts too much: it is of more consequence to carefully remove all external irritation from the surrounding horn, and the employing of uniform, regular, and strong, but not excessive pressure, which, if assiduously followed with the milder application of tar, are equal to the cure of most cases, except such as from long disease have become so destroyed and weak, as not to be capable of forming, or afterwards holding horn upon them, or, as is sometimes the case, that the coffin-bone has been injured, and an exfoliating portion of it keeps up the sore, in spite of every endeavour to heal it, till this is removed, as we have met with in two instances. This injury of the coffin-bone may arise from a nail driven by accident out of its course into the side of the foot, and which, entering the bone, splinters and destroys a portion of it; or from the remedies used being of a too corrosive nature, or too violent pressure, that shall have destroyed the surface of it, which dying, acts as an extraneous body in preventing the parts from healing; or the horse, from stamping violently on the unprotected bone, from pain or otherwise, shall fracture its thin edges, and thus keeping up an irritation which shall defy every attempt of cure till these are removed, each of which we have seen cases of in the course of our practice; we may just remark, that where there is an exfoliating portion, it is best to remove it as early as possible, without waiting the tedious process of natural exfoliation; the wound thus formed being then of the nature of a fresh wound, will more readily heal, a practice, we believe, first recommended by that truly great character John

Hunter. The above remedies also may be sometimes changed for each other with advantage, as the long continued application of one thing occasions it to lose its effect; and one agrees best with one subject, another with another, for which there can be no rule laid down.

By pursuing the above means steadily and uniformly for about nine months, the above tedious and desperate case was cured, and every part of the foot covered with horn: the horse was then turned to grass to encourage the more rapid growth of the horn. On his return from grass he was put to work, but suddenly died in a few months after of a liver complaint, which afforded an opportunity we had much sought for, of examining the condition of the coffin-bone after a long existence of this complaint, and also whether nature would restore the lost foliated substance of the hoof; and on examination, the foliated horn had been in a great measure repaired, and was growing down quite perfect; having covered two-thirds of the inside of the hoof where the canker had existed, and where it terminated, there was seen a smooth sort of cartilaginous surface on the inside of the hoof, and a similar one attached to the foot, so that these laid in contact with each other without the processes.

The sole which is less richly organized in its structure than the wall of the hoof, had no perceptible difference from the original sole. If however the coronary ring and origin of the Podophylla had been destroyed, we should doubt in that case the possibility of their reproduction; but in this instance, the coronary ring and cutidura had been carefully preserved. The coffin-bone had suffered greatly by the disease, being considerably diminished on the side on which the sore had existed, and was become very porous, rough, and uneven; on its upper part near the coronary ring a rough elevation of bone had been thrown out, of the size of a pea, such as is deposited in splints and spavins, being whiter and of not so dense a texture as the natural bone. The channel of the artery had also a thin white osseous deposit running to the inside of the heels of the coffin-bone, even where no sore had existed.

In the course of the treatment of this disease, we have had recourse to many different measures in different subjects, for keeping on the dressings to the foot; among others for this purpose we had made a leather boot, laced on its sides with a wooden sole, defended at the bottom by a thin ring of iron; this boot afforded the requisite pressure, but kept the foot, as we found by experience, too hot and moist, so that the horn was no sooner formed than it again exfoliated. Flannel bandages were found to be subject to the same inconvenience. Shoes made with small inverted hooks to the sides, passing the bands over the coronet, could not be used for any length of time, from the skin of the coronet ulcerating from the pressure: we found on the whole, nothing surpass the application of pledgets of tow rolled up, dipped in tar and tied round the foot with tar cord. The last point is generally by far the most difficult to heal on the side of the foot, and it will be found in general to be about opposite the circular artery of the coffin-bone, or its foramen; in the sole the most difficult point is the heel, and the junction of the sides of the frog with the inflexions: to get at these most conveniently, tow rolled up pretty tight between the hands, then immersed in the dressing, and thrust into the cavity, will be found the most convenient way; another roll being laid over this, and another till we arrive at the level of the sole, when a general pledget is applied over the whole. At other times we thought it more convenient and advantageous, in sole cases, to pass the iron plate under the shoe, and then ram it full by pushing in the dressings through the openings of the heels.

If there be much moisture or reeking in the dressings the case rarely goes on well. The plentiful use of tar seems to have the power however of suppressing this transudation, and cannot be too much attended to, as it serves also to keep the wet from it, if the horse be used on the road.

A dry loose place is better in the cure of this complaint for the horse, than standing constantly in one position in a stall, where especially if it be in the hind legs, the blood accumulates with too much force from the declivity of the stall, their position being much lower than the rest

of the body, and their distance from the source of circulation makes it less powerful. Exercise, if the lameness is not so great as to forbid it, is much to be recommended, and the occasional use of physic, especially where the horse stands still; a rowel also may be had recourse to with advantage, especially if there be any disposition to grease.

The frog, we have thought, appeared to be weaker in its powers of forming horn than the sole, and this than the wall; and the first horn is more apt to be undermined and exfoliate from this part, though it may appear fair to the eye: cells containing a white semifluid matter also rises under it and that of the sole, and is often the attendant of these exfoliations.

The cooler the foot can be kept, the more progress is made in the cure; therefore, much dressing or much covering is not so well, and water, though highly prejudicial, if applied for a constancy, yet may be used to wash the foot with, and afterwards being well wiped dry the dressings are applied, as we have thought, with good effect. In some cases, where the fungus rises higher than the horn, and it may be an object to save the horn, it will be better to attack the fungus by carefully paring it with a knife till blood almost appears, and then use the desiccatives and pressure; at any rate by this means, less of the horn need be removed, as we get at it closer to the fungus than in the other case; and it is always of consequence where it can be done, to save all the horn possible, on account of its slow growth.

In dissecting away the offending points and edges of horn, we have found it useful to observe the rule of beginning first in the most depending parts of the foot, that if the blood starts, it shall not obscure the parts you are next to come to, as it would do if you commenced differently. If inadvertently a vessel is opened that is troublesome, it is most readily stopped by the point of the cautery, without affecting the other part.

A kind of canker that is truly difficult of cure is the following-- A large draft horse that had occasionally been dressed by the smiths for more than a twelvemonth, had a canker of the near hind foot, with

the following appearances: the frog was large and fleshy, with a smooth red surface that would form a hard shell of horn, loosely attached and quickly exfoliating; the sole every where bare of horn, having threads or fibres of considerable length, and hardened only at their extremity, their roots being inundated with a white milky secretion. After endeavouring ineffectually to harden these into horn, we cut them close off with a pair of scissars, and found that we made more progress upon the disorder: the parts, however, were so weak, that they appeared unable to retain the horn they had formed, and after several exfoliations of this sort, finding that little ground had been made, from the vicious disposition of the animal, probably made so by the long pain he had been exposed to, and the time it consumed as well as the assistance it required, we determined to abandon the case. Two or three such cases have we seen, out of about twenty, some of which have been easily cured in a few weeks.

Having given some account of the disease itself, it will now be right to consider what is its cause, and if it can be prevented, for we fully concur in the words of Vegetius: (lib. 2. c. 58.) "*prestantius concilium est pedum tueri sanitatem quam passionem curare*;" preventive means are certainly the most wise, and after such a description of this disorder, there is no one, we should apprehend, that would not be anxious to avert it. We consider the most prevailing cause of this complaint to be the running frush, which first only affects the cleft of the frog, but becoming aggravated, it gradually undermines the horn of the frog and spreads to its sides, and from thence to the sole, and so on to the wall and whole foot.

We remember one case where it appeared brought on by the grease, the discharge from which running down upon the frog, at length destroyed the horn, and brought on canker. Shaving the frog too close with the buttress would occasion this part to dry and crack, and wet getting into the cracks, and lodging there, would rot the frog and induce canker. Any wound of the frog or sole not healing kindly at

first by the blood, such as a kennel nail wound, or any other description of wound, becoming irritated by the surrounding horn, would form a canker; however, these are rare causes compared with the one we have mentioned, viz. the running Frush, the commonest source of this mischief, which is certainly increased by the frog being squeezed together by the contraction of the heels, and this again arises from the nailing of an iron ring for a shoe permanently to the foot.

ON CORNS, OR THE BRUISED SOLE.

THIS is a troublesome disease in the feet of horses, most generally occurring in the fore feet, and in the inside heel, within the angle or inflexion of the quarter within the bar; though these bruises are sometimes found in both quarters or sides of the foot.

Terms improperly used in any art or science render its access more difficult, obscure our views of it, and retard its advancement: so the term *corns* is, in this case, a gross misapplication of words, creating perplexity and misconception, and which actual experience even in the disease is hardly sufficient to do away.

When the skin of the human foot is gradually compressed or rubbed, without any sudden and violent irritation that shall raise the cuticle, or create a sore, it thickens first, then becomes horny, and is rightly enough termed a corn, from *cornu*, Lat. or *corne*, Fr. *horn*.

In the horse, on the contrary, whose foot is every where thickly clothed with natural horn, such an occurrence, if it were possible, could not be a disease; but if a bruise takes place in the foot, at the point above described, it is called a *corn*, though agreeing in nothing with the former disease, but in the common circumstance of its affecting the foot with pain and lameness, and is simply a bruise from the iron.

Where a corn, as it is called, exists in the foot, it is known by a redness, more or less intense, in the angle formed by the union of the bar with the sides of the foot, or the intertortional point of the sole, and is most generally observed, as we have already stated, in the inner quarter; it is tender if pressed upon, producing lameness; and if the irritation is carried far enough, it festers, and the pus, being prevented escaping below by the sole, it forms a passage inside the hoof upwards, through the foliated substance or elastic processes, to the coronet; and if a shoe, pressing too hard upon the part, continues to be used, the irritation being kept up for a long time, the part becomes weakened in its functions, not forming good sound horn, and a painful disease is created, which is eradicated with difficulty, and is liable to return after relief has been obtained by the slightest renewal of pressure, especially if permanent.

Having briefly described the disease, as it commonly appears, we proceed to consider its cause, and the cure.

As it is the unequal pressure that produces corns in strong feet, from the shoe bearing too hard upon the point of the foot above indicated; so, in feet naturally weak, a slighter degree of pressure, if the pressure be permanent, shall be sufficient to induce it; so that the disease may be observed in all sorts of feet, but by far more frequently in weak ones, or in low heeled feet, or where the heels project and are very full, the horn turns under, and is thin.

The horse's foot, we may remark, by being continually bound by the nails which attach the shoe to the foot, is ever hardening and diminishing in its volume, under their influence and pressure, and especially all the elastic parts of the foot, which, not being then called into much action, become inert and rigid, or are absorbed; the posterior parts of the foot, in particular, are deranged by it, and, in its contracting, the hoof often forms waving lines of horn, which turn under at the heels, so that the shoe will take its bearing on the parts

in a direction tending inwards, and bring on bruises and weakness, of the more tender and confined parts of the foot.

The inflammation occasioned by the bruise or pressure causes an increase, and sometimes rupture of the blood-vessels of the part pressed upon, so that instead of lymph, the red parts of the blood flow into them: and hence that redness in the horn of the bruised part, the external indication of this disease.

If the pressure be speedily and effectually removed, and all external irritation kept away, healthy horn will soon form again, and the disease disappear; but if the irritation be kept up for any length of time, or has been attended with much violence, the vascular parts go on to suppurate; and the pus, as we have observed, forces its way with great pain to the coronet. Its frequent recurrence leaves the parts very weak, and the smiths are then apt to imagine it is natural to them, and convey this idea to others, and seldom admit the real cause of the disease.

One circumstance, we believe not much understood, is of importance to disclose here, the production of this disorder, and which cannot be too much known and considered, as it may be the means of warning those, whose experience has not yet informed them of it, of the cause of danger: it is this, that if we make a perpendicular section of the horse's foot, across the two points of the heels, where the corns usually are found, it will be observed that the outside and inside heels exhibit different appearances: the vascular parts lying much lower on the inside than on the outside heel; so much so, that any one holding the foot from the ground, and levelling the sole to his eye with his drawing-knife or buttress, would meet with the blood of the inside heel before he had brought it to what he would conceive the proper level of the outer heel, and before he at all suspects it; for the horse's foot, no doubt for the wisest purposes, is not alike in both heels, as on a careless inspection we should apprehend it to be, but is placed inclining to the ground, with the inside the highest, forming an elevation which throws the bearing to the outside, as explained more fully in my descrip-

tion of the foot; the inner parts being thinner in horn, are more elastic and fleshy; while the outer are stouter in horn, and with less vascular matter, and more adapted for receiving the wear, which, we may observe, takes place primarily on the outer side of the toe or pince, as may be seen by looking at the shoes when taken off, or by observing the wear of the natural foot unshod; and thus compression and uneasiness are prevented by the greater yielding and elasticity of the inner quarter and the heels: for had the foot been on every side equally unyielding, resistance, compression, and pain, under heavy burdens, or great or long continued exertions of the animal, would have been produced.

It is this difference which deceives the smith, and makes him bring the shoe nearer the quick on this heel than he intends; and it is the superior elasticity and vascularity of the fore feet that occasions them to be more subject to this disease than the hind, where Corns rarely occur, and which we have heard the smiths attribute to their standing with their hind feet in the dung of the stable.

The position also, in which the smith is obliged to hold the foot between his thighs, turned upwards, and drawn away from the horse outwards will tend to increase his deception, in regard to these circumstances of the apparent levelling of the hoof; and where there is a weak, low, fleshy heel, as it is termed, a slight mistake is sufficient to produce a bruised heel, or corn, which in stouter feet it would be more difficult to do; though in these we sometimes find it to be done.

A shoe too narrow for the foot, or with the heels made too full and thick, and not sufficiently sloping inwards, will induce a bruise of these parts, by pressing on the bar; and we see, by the brightness of the shoe at this part, after it has been removed, that the nails do not entirely prevent the motion of the heels on this surface.

Finally, a shoe not equally fitted to bear alike on all the parts of the foot, but bearing on the toe and heels only, especially the inner heel, and not taking sufficient pressure at the quarters, where the chief pressure should be, would, by this partiality of pressure, induce in-

flammation pain and bruises. Clenching the nails too forcibly near the heel, so as to induce more pressure there than at the toe, would also do the same thing.

If this reasoning, therefore, be true, the Corn arises from the weakness and insufficiency of the foot to bear the pressure of a nailed shoe, or from partial and ill disposed pressure in the strong feet, or improper and too close paring: therefore, the ancients, who, we believe, knew nothing of this nail shoeing, had not their horses subject to this disease; and such, on examining their writings, turns out to be the fact, though they have described, and often most truly, the other diseases of the horse. The "*Pulmunculus ad aperturam*" of Vegetius, lib. ii. cap. 56, has some of the characters of the Corn; but it is not clear whether oxen or horses were the objects of it, and he recommends unsoleing for it: whatever it is, it was probably a disease arising from a weak heel, which, by long journeys and rough roads, might be so bruised, as to bring on similar consequences.

Having described the appearance of the Corn and its causes, we have now to consider the remedy, first observing that prevention which is ever the wisest line of conduct, should be our especially aim, and this I should propose to be done by always keeping the inner heel easy, by being forced downwards by a blow of the hammer out of the plane of the rest of the upper surface of the shoe.

Where the bruised heel has taken place, the first and most natural suggestion is to remove the shoe, and take away all the red diseased horn with the drawing-knife, and make the shoe so that on the re-application of it there shall be no pressure at all upon this part, and admitting of a new growth not subject to external pressure. If the horse is turned to grass during its growth, it will in general grow down quite perfect: if the disease however, has been of any duration, it is apt to return, if the smith brings only the ordinary pressure of a shoe upon it; and this takes place sometimes by degrees, and not perhaps at the first shoeing, which encourages him to go on till the effect is felt, and first tenderness and afterwards lameness ensue, or the parts fester if more severe pressure has been applied according, to

the degree of it. The barr shoe, on this account, is often resorted to by the smiths with good success; any pressure to the bruized point is done away by the parts of the shoe opposite to it being beat out of the line or plane of the shoe. If it has festered and pus formed, which very soon happens, a free opening must be made through this point of the sole, and the matter be encouraged to discharge itself below, for if it forces its way to the coronet, it disturbs the podophylla, which are never perfectly restored, then to the foot a light stopping of dressings of rosin softened with and applied on tow and bound in with tar chord. This, which is seldom persisted in long, restores the horse to soundness; which being then left off, and the ordinary shoe applied, again induces the consequences, sooner or later, that we have described. A shoe may be beat or filed out with a space opposite the corn; but we have found it more easy and certain, when the parts are injured in this way, to make a shoe rather thicker than the ordinary shoe, and to cut off entirely that extremity of it that comes opposite the corn, to such a distance from it, so as to be assured no pressure even remote can arise from it; for if the shoe be left long, however managed, by much wear it is apt to play and become relaxed, from the parts of the hoof and of the shoe giving way to each other, and thus creating a degree of looseness, when the shoe coming upon the part, is sure to re-produce the disease. It will be objected by the inexperienced that the corn is left unprotected, which is true but the thickness of the shoe will protect it, and it will be found in practice of little consequence, for it is much better of the two evils to contend with the occurrence of casual pressure from irregularities in the road, than the perpetual pressure of an iron shoe. In slight cases, after the shoe has been nailed on pretty firmly, we have taken a small saw, and sawed away the horn resting on the shoe at this part, so as to make it press less there than on any other part of the foot; but if the shoe be allowed to stay on too long, the nails as we before stated become relaxed, by the horn giving way, and then pressure will again take place

on the bruised part. So that it is much the safest to remove the iron entirely.

This shoe, though simple, is figured in the Stereoplea *Pl. 1, Fig. 9*, and after extensive opportunities of using it, we found it in practise beneficial beyond our expectation. The removal of the heel of the shoe should be done with boldness, and a considerable piece taken off, otherwise its pressure by approaching the tender parts, will convey an unpleasant impression, and half measures may be more injurious than not shortening the shoe at all; for if it rests solidly on the intertortional column or strong angle, formed by the duplication of the hoof at its inflexion, it would be better than if the shoe was a little shorter, when it might burrow in and bruize the sole, where the wall is strong this may be done with safety, especially if the hoof does not much turn under at the heel. We have fully ascertained by unfortunate experience that the bar itself will bear no pressure whatever, and therefore the shoe should always be bevilled off inwardly, and well clear this part. At Bristol, a man employed in making the new shoe, ignorantly laid the iron upon this part by thickening the heel of the shoe and turning it up, and so lamed most of them, who were immediately relieved by properly bevilling the heel of the shoe inwards. I am disposed to believe, that the reason the bar will bear no pressure, is from there being no proper *cutidura* beyond the inflection. As the prevention of disease is more important and generally more simple than the cure, so we believe the turning down the internal heel of the shoe from much pressure on this part should accompany its application in a general way. and more particularly in low and weak feet.